

Amendment to the Claims

A list of pending claims follows:

1. (currently amended) A snatch disconnection lanyard-assembly for use with a lanyard, the assembly comprising a tensioner, whereby the tensioner may be set to allow which in use has first and second operational modes, the tensioner comprising setting means for (a) allowing paying out of the lanyard in the first operational mode and (b) allowing pulling or set to pull in of the lanyard and when set to pull in, will resist while resisting paying out of the lanyard in the second operational mode, thereby providing a tensile force for snatch disconnection.

2. (currently amended) An lanyard assembly as defined in claim 1 whereby when the tensioner is set to allow paying out the lanyard, pulling in of the lanyard by the tensioner is resisted.

3. (currently amended) An lanyard assembly as defined in claim 1 further comprising a tensioning cable attached to or comprising the lanyard.

4. (currently amended) An lanyard assembly according to claim 3 in which the tensioner further comprises a spring-biassed reel and whereby when in use, the tensioning cable is wound up onto and unwound from a the reel which is spring biassed to wind up the cable.

5. (currently amended) A lanyard snatch disconnection assembly according to claim 4 for use with a lanyard, the assembly comprising:

a. a tensioner which in use has first and second operational modes, the tensioner comprising setting means for (i) allowing paying out of the lanyard in the first operational mode and (ii) allowing pulling in of the lanyard while resisting paying out of the lanyard in the second

operational mode, thereby providing a tensile force for snatch disconnection, the setting means comprising a spring-biassed reel;

b. a tensioning cable attached to or comprising the lanyard and which may be wound up onto and unwound from the reel which is spring biassed to wind up the cable;

c. a mounting bracket;

d. a housing for the reel; and

e. a flexible conduit extending between the bracket and the housing and through which the tensioning cable runs.

6. (currently amended) ~~An lanyard~~ assembly according to claim 4 ~~comprising in which the setting means comprises a first ratchet mechanism which can be set to resist rotation of the reel in the unwinding direction, thereby resisting paying out of the lanyard, but additionally and alternatively can be reset to resist rotation of the reel in the winding up direction, thereby allowing paying out of the lanyard and resisting pulling in of the lanyard while a snatch connection is made up.~~

7. (currently amended) ~~An lanyard~~ assembly according to claim 6 further comprising a second ratchet mechanism, whereby ~~it~~the assembly is biassed towards the set condition and is moved to the reset condition by rotation of a key inserted into the assembly, counter rotation of the inserted key being resisted by a furtherthe second ratchet mechanism.

8. (currently amended) ~~An lanyard~~ assembly according to claim 1 further comprising a brake operable to resist paying out of the lanyard at above a predetermined speed.

9. (currently amended) ~~An lanyard~~ assembly according to claim 1 further comprising a resilient link connected to the lanyard, opposed parts of the link each carrying abutment faces, the respective abutment faces on either side being brought

into contact with each other when the link has been deformed by a predetermined amount.

10. (currently amended) ~~An lanyard~~ assembly as defined in claim 9 in which the abutments, when in contact, transmit tensile loads applied to ~~the connector~~ opposed parts of a connector.

11. (currently amended) A snatch disconnection lanyard assembly ~~according to claim 9 in which the~~ comprising (a) a lanyard ~~hashaving~~ a plurality of ends attached to a connector half at spaced circumferential locations, (b) a tensioner adapted to be set to allow paying out of the lanyard or set to pull in the lanyard and when set to pull in, will resist paying out of the lanyard, thereby providing a tensile force for snatch disconnection, and (c) a resilient link connected to the lanyard, opposed parts of the link each carrying abutment faces, the respective abutment faces on either side being brought into contact with each other when the link has been deformed by a predetermined amount, the link comprising a spreader bar connected between a tensioning cable and the lanyard.

Response

A. Introduction

Claims 1-11 remain pending in the application. The Examiner initially rejected claims 1-2 under 35 U.S.C. § 102(e) as anticipated by U.S. Patent Publication No. 2002/0030133 of Ratzlaff and claims 1-4 and 6-10 under section 102(e) as anticipated by U.S. Patent No. 6,149,132 to Ostrobrod. The Examiner additionally objected to claim 11, stating the claim would be allowable if appropriately written. According to the Office Action Summary, claim 5 is also rejected; however, because no rejection of that claim appears in the Office Action, Applicants assume it too would be allowable if redrafted in independent form.

B. Claims 5 and 11

Applicants, consequently, have rewritten each of claims 5 and 11 in independent form. Applicants believe these revisions render the claims allowable over the references of record and accordingly request that claims 5 and 11 be allowed.

C. Claims 1-4 and 6-10

As both originally and presently drafted, independent claim 1 refers to a snatch disconnection assembly in which a tensioner may be set for operation in either of two modes: a first mode in which a lanyard may be paid out and a second mode in which the lanyard may be pulled in. In this second operational mode, setting means of the tensioner will resist paying out of the lanyard. As noted in the application:

It will be apparent that the cable cannot act as a fixed anchor-point unless the reel is prevented from rotating in the reverse direction. This function is

provided by an escapement pawl, or latch, which engages with a toothed wheel rigidly coaxially attached to the reel.

The escapement latch is designed to be spring biased in either direction, dependent on the rotational position of a manually operated lever which is rotated by a hexagonal key inserted into a matching socket in the lever's shaft. In the position shown in fig. 3, the reel will allow cable to be paid out from the reel with the latch preventing its return; whereas in fig. 4, the spring tension is applied to the cable, and the reel will resist any attempt to pull out more cable. This latter role provides the desired anchor-point function.

See Application at p. 3, l. 23 through p. 4, l. 2 (numerals omitted)

Neither reference cited by the Examiner contains setting means for performing the dual-mode operations of claim 1. The Ratzlaff publication discloses a container for storing the loose end of a tie-down strap used to secure loads on trucks. See Ratzlaff, ¶ 0004. The container comprises a slotted shaft 46 for winding up the loose end and a tensioner in the form of a flexible piece of plastic or spring steel 54. The free end of the plastic or steel is held tangential to and in contact with the coiled strap end to provide frictional resistance against winding and unwinding. See id., ¶ 0024. ***The device clearly cannot be set between two different modes of operation and entirely lacks an operative mode in which the strap (which presumably the Examiner considers to be a "lanyard") is pulled in while paying out is resisted for purposes of providing a tensile force for snatch disconnection.*** For at least this reason, Applicants request that the Examiner's rejections based on the Ratzlaff publication be withdrawn.*

*Applicants also contend that, because the Ratzlaff publication is directed to load-securing straps rather than snatch disconnection lanyards, it is from a sufficiently distinct field of endeavor as to disqualify its use as prior art to the claims.

The Ostrobrod patent addresses a tension control device for a horizontal lifeline. A lever can be used to pre-tension the lifeline to the point where a first clutch slips and no further torque can be applied to a pulley. See Ostrobrod, col. 4, l. 58 to col. 5, l. 17. In the event a worker falls, higher tension is applied to the lifeline, causing a second clutch to slip, initially allowing paying out of the lifeline over the pulley to provide a shock-absorbing function. Paying out of the lifeline is then arrested by a conventional brake mechanism and ultimately, if necessary, by a knot in the lifeline that cannot pass through the safety tensioning apparatus. See id., col. 5, l. 53 to col. 6, l. 20.

Again, however, *the device of the Ostrobrod patent has only a single mode of operation and thus cannot be set to two different operative modes* as recited in claim 1. Furthermore, Applicants believe the Ostrobrod patent teaches away from the claimed invention, in that an essential requirement of the device of the patent is to provide a shock absorbing function for fall arrest purposes, minimizing shock loads on the falling person and on the various lines, lanyard, and support structures. This shock-absorbing provision directly contradicts language of claim 1 relating to providing a tensile force for snatch disconnection (*i.e.* transferring the snatch connection reaction force, without attenuation, to the strong point to which the snatch disconnection assembly is connected). Applicants accordingly request that the rejections based on the Ostrobrod patent be withdrawn for multiple reasons and that claims 1-4 and 6-10 be allowed.**

**Applicants contend that the Ostrobrod patent too is directed to a sufficiently distinct field of endeavor as to disqualify its use as prior art to the claims. Moreover, if the Examiner does not

Conclusion

Applicants request that the Examiner allow claims 1-11 and that a patent containing these claims issue in due course.

Respectfully submitted,



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withdraw the rejections in response to this submission, Applicants reserve the right to submit evidence disqualifying use of the Ratzlaff publication and the Ostrobrod patent by the Examiner under 35 U.S.C. § 102(e).